THE WORLD OIL MARKET IN 1980

25X1

As a result of price increases during the last couple weeks, the OPEC average official sales price in now approaching $29 per barrel, up from $21.40 at the start of December and $20 on 1 July. The combination of recent price increases, high inventory levels, and relatively warm weather in most foreign countries is taking enough steam out of demand to ease pressures in the spot product markets. In the Rotterdam spot market, heating oil, gasoline, and heavy fuel oil prices have fallen $9.35, $5.75 and $5.95 per barrel, respectively, since early January. Product prices on the US east coast markets have also dropped. This pattern is beginning to spill over to the crude spot price market. Transactions reportedly are being concluded in the $30 to $35 per barrel range on the limited number of sales taking place. As a result of rising official prices and declining spot prices the gap between spot and official prices has been virtually eliminated. 25X1

A major remaining threat to market balance is the persistence of large price discrepancies not justified by quality differentials among different producers. Although Algerian crude is priced $3 per barrel above comparable Nigerian and Libyan crudes, the largest discrepancies are between these major African producers on the one hand and the Persian Gulf producers on the other. Libya and Nigeria, for example, are now charging $4-5 per barrel more than the Persian Gulf producers for competitive types of light crude, after counting transportation differentials. At the same time, heavier crudes from Iran and Venezuela are selling for about $3-6 more than competitive crudes from Saudi Arabia. Consequently, if the higher prices stick, the market would appear to justify further increases in Saudi crude bringing the average OPEC official price to over $30. 25X1

The Saudis evidently would like to see the higher prices rolled back somewhat. We doubt this will be possible however because of the willingness of other OPEC countries to cut production. Saudi Arabia may defer any of its own production cuts in the hope that a soft market will force some erosion of the upper-tier prices. But Riyadh may not be able to control events. Demand for the lighter oils is both less income-elastic and less price-elastic than demand for heavier oils because of the higher yield of light products such as gasoline from the lighter oils; consequently, demand for the lighter oils should fall less in 1980 as the recession progresses. Moreover, Libya, Algeria and Nigeria may cut production themselves, at least enough to maintain a tight market for light oils. 25X1

Consumption Patterns

In 1979, oil consumption in non-Communist countries registered a 1 percent gain over full year 1978 levels and trended downward throughout the year, largely in response to higher prices. Non-Communist oil consumption rose 3 percent in the first quarter, 1-2 percent in the second quarter and about 1 percent in the third quarter compared with year-earlier levels. Preliminary and partial data indicate that oil consumption in the fourth quarter was about the same as a year earlier—a roughly 2 percent decline in US oil consumption being offset by increased consumption in the rest of the world [redacted] 25X1

Thanks to the drop in US consumption, overall gasoline use was down 2 percent in the Big Seven industrial countries in January-September 1979 and probably remained depressed in fourth quarter 1979. Enhanced conservation and increased availability of natural gas also permitted a significant year-over-year decline in US light fuel oil and heavy fuel oil use. This decline more than offset slight increases in the six major foreign countries. During the first 9 months of 1979, heavy fuel oil use in the six foreign countries combined was 2 percent above year earlier levels while consumption in the United States was 9 percent below year earlier levels, a pattern that probably continued into fourth quarter. [redacted] 25X1

Supply Developments

Contributing to continued market tightness during the fourth quarter was a roughly 400,000-b/d drop in non-Communist oil supplies. Despite Saudi Arabia's decision to continue producing at 9.5 million b/d, overall OPEC production fell by 300,000 b/d due to a 200,000 b/d drop in Iranian output and a 100,000 b/d cut in Nigerian production. Non-OPEC production dropped by 100,000 b/d due to a weather related problem in UK North Sea production and a decline in US output. Altogether non-Communist oil supplies in fourth quarter 1979 totaled about 52.1 million b/d. All of these figures exclude refinery gain, as do our data on consumption.

[redacted] 25X1

Inventory Patterns

These production and consumption patterns probably permitted inventories to hold steady or increase slightly during the fourth quarter. Altogether, inventory buildup added about 600,000 b/d to non-Communist demand during 1979. As a result, non-Communist oil stocks on land (after deducting government-held stocks) probably stood at about 4.1 billion barrels by the end of the fourth quarter, about 240 million barrels above year-earlier levels and approximating inventory levels at the end of 1977 when oil was stockpiled in anticipation of an OPEC price hike. [redacted] 25X1

Non-Communist countries replenished oil inventories at a rapid pace in the second and third quarters of 1979, following a substantial first quarter drawdown. In January-March, primary stocks fell at a rate of 4.2 million b/d—substantially more than the normal rate—as a result of strong consumption and the halt in Iranian exports. A stock buildup of about 3.3 million b/d during the summer months exceeded normal rates and boosted inventories to near normal levels at the end of September. Uncertainties regarding future OPEC production will probably influence stockholders to keep inventory levels relatively high in the months ahead even though weak economic growth and higher prices will undercut oil consumption. [redacted] 25X1

Demand for Oil

Non-Communist oil consumption should decline substantially this year, primarily reflecting the expected decline in economic growth in major industrial countries. Continued improvement in energy conservation as a result of price hikes over the last 12 months will also help constrain demand. Taking all of these factors together we would expect about a 700,000-b/d decline in total non-Communist oil consumption this year to roughly 50.8 million b/d, the first decline since 1975. If inventories hold at yearend 1979 levels, total non-Communist demand in 1980 would average about 1.3 million b/d below the 1979 level. [redacted] 25X1

Non-Communist Oil Market: 1980 Outlook

Million b/d

	1979	1980	1980 1st Half	1980 2nd Half
Consumption	51.5	50.8	51.5	50.0
Inventory Change	0.6	0	−0.5	0.5
Total demand	52.1	50.8	51.0	50.5
Non-OPEC supplies	20.7	21.2	21.1	21.3
Demand for OPEC oil	31.4	29.6	29.9	29.2

51.0 50.5

[redacted] 25X1

OECD Consumption

OECD consumption will almost certain decline sharply this year—probably by somewhat more than 1 million b/d—as the economic slowdown takes hold. Altogether we expect OECD economic growth of around half a percent in 1980 following an estimated 2.9 percent increase in 1979. [redacted] 25X1

Our oil consumption projections also incorporate an estimated increase in nonoil energy supplies available to the OECD countries of 500,000 b/d oil equivalent. In mapping out our oil consumption estimates for the OECD group, we assumed the following business-cycle pattern:

- US economic growth averages −1.0 percent for the year as a whole with the recession bottoming out in third quarter 1980; growth is assumed to turn moderately positive in the fourth quarter—at a 1.5-percent annual rate.

- West European real growth averages 2.3 percent for the year as a whole on the strength of the momentum from 1979 and some moderate first-half gains; we expect an economic downturn to materialize by mid-year, yielding a second-half real GNP decline of 1 to 2 percent (annual rate).

- Japanese economic growth is projected to average nearly 4.0 percent for the year as a whole; second half real economic growth, however, may slow to only half this rate as the downturn elsewhere feeds back on Japanese export industries. [redacted] 25X1

Altogether this yields an OECD growth outlook close to what most forecasters currently expect. As a result, our 1980 OECD oil consumption projection of 39.5 million b/d is roughly similar to available industry forecasts. In brief, our OECD consumption estimate is as follows:

- US consumption should approximate 17.7 million b/d, down from 18.0 million b/d last year. In addition to the business cycle pattern we visualize, these projections assume US non-oil energy supplies increase by about 200,000 b/d oil equivalent over last year's average.

- West European oil consumption should approximate 13.9 million b/d, a drop of about 700,000 b/d from 1979. This reflects the effects of the expected second-half 1980 economic downturn and a projected 200,000 b/d oil equivalent increase in non-oil energy supplies.

- Japanese oil consumption will probably decline by 100,000 b/d to 5.4 million b/d if the business cycle materializes as we now see it; Japanese non-oil energy supplies are expected to increase only slightly if at all this year.

- Canadian consumption should decline slightly this year, bringing demand about in line with production; Australia and New Zealand oil usage will not vary much from recent levels. [redacted] 25X1

Consumption Outside the OECD

Non-Communist oil consumption outside the OECD should increase by several hundred thousand barrels per day, reflecting increased usage in oil producing countries themselves. Oil consumption in OPEC countries approximated 2.5 million b/d last year; we expect them to use at least 2.7 million b/d in 1980 based on recent trends and what we know of development plans in these countries. In the case of Mexico, Egypt, and Malaysia with ample supplies of their own, we expect consumption to increase by 100,000 b/d, 30,000 b/d and 20,000 b/d, respectively. For other non-OPEC LDCs, we have assumed that oil consumption is unchanged from estimated 1979 levels. This should be viewed as extremely conservative judgment since we are also projecting real GNP gains for this group (excluding Mexico, Egypt, and Malaysia) of about 5 percent. [redacted] 25X1

The Supply Question

Despite the expected decline in non-Communist demand little or no slack will emerge in the market over the course of 1980 because several OPEC countries are prepared to cut production as fast as demand falls. OPEC production would have to approximate 29 to 29.5 million b/d during the second half 1980 to assure market equilibrium, a reduction of about 1 million b/d from the present level of about 30.5 million b/d, given our demand projection and our assumption of a roughly 700,000 b/d increase in non-OPEC oil supplies this year. [redacted] 25X1

Mexican output should increase sharply this year, by perhaps 700,000 b/d over 1979 levels. North Sea production (UK and Norway) should rise about 600,000 b/d. These gains will be partly offset by further slippage in US output and some reduction in net exports from Communist countries. Recent price increases for oil—as well as for gold—will make it easier for the Soviets to reduce oil-export volume to the West without incurring hard currency shortages. As it is, Soviet oil shipments to the West in 1979 were roughly one-fifth below the same period last year and total net exports to the West from Communist countries dropped to 800,000 b/d last year compared with 1.0 million b/d in 1978. [redacted] 25X1

OPEC Production Policies

The major uncertainty over the next several months is who will cut production, under what circumstances, and by what amounts:

- The Saudi Arabian Government has decided to maintain output at 9.5 million b/d, at least through the first quarter, but frequently restates its intention to return to the 8.5 million-b/d ceiling as soon as market conditions permit. They have not spelled out what these conditions are.

- Kuwaiti production intentions are more definite; on 1 January 1980, the production ceiling was reduced from 2.2 to 2.0 million b/d and plans have been announced to further reduce output, if market conditions permit, by 500,000 b/d to 1.5 million b/d effective 1 April.

- Iraqi intentions are less certain. Some Iraqi officials have indicated that present output levels would be maintained. Others have claimed that production would be cut as soon as any slack emerges in the market. [redacted] 25X1

Aside from this group, several other countries would be willing to cut production rather than prices. Libya and Nigeria can be expected to each reduce output by 200,000-400,000 b/d if necessary to support their $34-35 prices. Libyan spokesmen have talked about reducing output to 1.7 million b/d from the current level of 2.0 million b/d. With a current account surplus in the $7-$8 billion range this year, Nigeria will be more inclined to reduce output than prices. In any event, these countries produce high-quality light oils, from which a high proportion of gasoline is derived. The demand for this oil is likely to drop relatively little in the face of either price increases or declines in economic activity. [redacted] 25X1

The OPEC supply outlook is further complicated by the political problems in

Iran. Continued political instability has contributed to the steady decline in Iranian production from about 4 million b/d in mid-1979 to an average of 3.4 million b/d in the fourth quarter. Oil Minister Moinfar has indicated that Iran plans to produce at the 3 million b/d rate in 1980, but this evidently assumes no further spillover of ethnic problems into oil producing regions and no further erosion in productive capacity. As it is, production averaged only 2.5 million b/d during January. Iran may be hard pressed to sustain even this pace by mid-year if field maintenance is not soon improved. [redacted] 25X1

The Saudi Dilemma

Given the willingness of the other countries to cut production, Saudi Arabia will be unable to have its way in holding down both prices and production. Specfically, if other producers, such as Libya, Nigeria, and Kuwait reduce output in response to a decline in demand for their oil, the Saudis will be unable to reduce their output any time this year without creating strong pressure for additional price hikes. Indeed, Saudi Arabia may be unable to cut output without causing price pressures if only the following two conditions hold: (a) Iranian production remains at the 2.5 million b/d level, and (b) Kuwait proceeds with its planned 1 April cut. [redacted] 25X1

Uncertainties

One uncertainty in forecasting the short-term outlook is obviously the pace of economic output in the oil consuming world. In making our forecast, we projected economic growth of only 0.5 percent in the OECD during 1980. For a variety of reasons, this forecast could prove to be either high or low. Thus far, the US economy has proved to be substantially more robust than most economists had thought likely. [redacted] 25X1
[redacted] 25X1

There continues to be great uncertainty in projecting the depth duration and timing of the business downturn that most of the economic forecasting community projects for this year. The downside risks seem greatest in the view of the probability that contractionary policies will be more widely adopted. Past correlations suggest that for each half percentage point of variation in OECD growth, oil consumption rises or falls by about 500,000 b/d. [redacted] 25X1

Another factor that bears heavily on oil demand in 1980, particularly toward the end of 1980, is the recycling of oil producer earnings, a question to some extent apart from the growth question. The uncertainties here bear very strongly on oil consumption in the LDCs and the smaller/weaker industrial economies. At present, it is not clear that all of these countries will be able to afford to import the levels of oil that would be associated with the rates of economic growth that we have assumed. Largely for this reason, we made the simplifying assumption that 1980 oil consumption in oil importing LDCs would not rise in 1980. This assumption could be off by as much as several hundred thousand barrels per day. [redacted] 25X1

Stock behavior is another uncertainty. There is a danger that if oil companies and consumers perceive that the price runup is over, they will see less advantage to holding speculative stocks. Thus, they may move to unload these stocks during the first half of 1980. In this event OPEC producers might feel compelled to cut output below the reduced consumption levels that will occur in 1980. The stage could be set for another price runup in the latter half of 1980 as consumers are forced to bid up oil prices in order to get OPEC producers to restore production cuts made because of the unloading of stocks during the first half. 25X1

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